

## STN Search

10/758,291

FILE 'HOME' ENTERED AT 16:17:05 ON 19 JUL 2006

=&gt; file .nash

=&gt; s HMG-coA synthase or 3-hydroxy-3-methylglutaryl-CoA synthase

L16 314 FILE MEDLINE  
L17 598 FILE CAPLUS  
L18 344 FILE SCISEARCH  
L19 123 FILE LIFESCI  
L20 366 FILE BIOSIS  
L21 276 FILE EMBASE

TOTAL FOR ALL FILES

L22 2021 HMG-COA SYNTHASE OR 3-HYDROXY-3-METHYLGLUTARYL-COA SYNTHASE

=&gt; s l22 and faecalis

L23 4 FILE MEDLINE  
L24 7 FILE CAPLUS  
L25 3 FILE SCISEARCH  
L26 3 FILE LIFESCI  
L27 3 FILE BIOSIS  
L28 2 FILE EMBASE

TOTAL FOR ALL FILES

L29 22 L22 AND FAECALIS

=&gt; dup rem l29

PROCESSING COMPLETED FOR L29

L30 7 DUP REM L29 (15 DUPLICATES REMOVED)

=&gt; d ibib abs 1-7

L30 ANSWER 1 OF 7 MEDLINE on STN DUPLICATE 1  
ACCESSION NUMBER: 2005678159 MEDLINE Full-text  
DOCUMENT NUMBER: PubMed ID: 16245942  
TITLE: X-ray crystal structures of HMG-CoA  
synthase from *Enterococcus faecalis* and a  
complex with its second substrate/inhibitor  
acetoacetyl-CoA.  
AUTHOR: Steussy C Nicklaus; Vartia Anthony A; Burgner John W 2nd;  
Sutherland Autumn; Rodwell Victor W; Stauffacher Cynthia V  
CORPORATE SOURCE: Department of Biological Sciences, Purdue University, West  
Lafayette, Indiana 47907, USA.  
CONTRACT NUMBER: CA23568 (NCI)  
HL47113 (NHLBI)  
HL52115 (NHLBI)  
RR07707 (NCRR)  
SOURCE: Biochemistry, (2005 Nov 1) Vol. 44, No. 43, pp. 14256-67.  
Journal code: 0370623. ISSN: 0006-2960.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
OTHER SOURCE: PDB-1X9E; PDB-1YSL  
ENTRY MONTH: 200601  
ENTRY DATE: Entered STN: 22 Dec 2005  
Last Updated on STN: 28 Jan 2006  
Entered Medline: 27 Jan 2006

AB Biosynthesis of the isoprenoid precursor, isopentenyl diphosphate, is a critical function in all independently living organisms. There are two major pathways for this synthesis, the non-mevalonate pathway found in most eubacteria and the mevalonate pathway found in animal cells and a number of pathogenic bacteria. An early step in this pathway is the condensation of acetyl-CoA and acetoacetyl-CoA into HMG-CoA, catalyzed by the enzyme HMG-CoA synthase. To explore the possibility of a small molecule inhibitor of the enzyme functioning as a non-cell wall antibiotic, the structure of HMG-CoA synthase from *Enterococcus faecalis* (MVAS) was determined by selenomethionine MAD phasing to 2.4 Å and the enzyme complexed with its second substrate, acetoacetyl-CoA, to 1.9 Å. These structures show that HMG-CoA synthase from *Enterococcus* is a member of the family of thiolase fold enzymes and, while similar to the recently published HMG-CoA synthase structures from *Staphylococcus aureus*, exhibit significant differences in the structure of the C-terminal domain. The acetoacetyl-CoA binary structure demonstrates reduced coenzyme A and acetoacetate covalently bound to the active site cysteine through a thioester bond. This is consistent with the kinetics of the reaction that have shown acetoacetyl-CoA to be a potent inhibitor of the overall reaction, and provides a starting point in the search for a small molecule inhibitor.

L30 ANSWER 2 OF 7 MEDLINE on STN DUPLICATE 2  
 ACCESSION NUMBER: 2004628546 MEDLINE Full-text  
 DOCUMENT NUMBER: PubMed ID: 15604784  
 TITLE: Production of mevalonate by a metabolically-engineered  
 Escherichia coli.  
 AUTHOR: Tabata Kazuhiko; Hashimoto Shin-Ichi  
 CORPORATE SOURCE: Tokyo Research Laboratories, Kyowa Hakko Kogyo Co., Ltd.,  
 3-6-6, Asahi-machi, Machida-shi, Tokyo 194-8533, Japan..  
 tabata@kyowa.co.jp  
 SOURCE: Biotechnology letters, (2004 Oct) Vol. 26, No. 19, pp.  
 1487-91.  
 Journal code: 8008051. ISSN: 0141-5492.  
 PUB. COUNTRY: Netherlands  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 200505  
 ENTRY DATE: Entered STN: 20 Dec 2004  
 Last Updated on STN: 17 May 2005  
 Entered Medline: 16 May 2005

AB Mevalonate is biosynthesized from acetyl-CoA and metabolized to isoprenoid compounds in a wide variety of organisms although certain types of prokaryotes employ another route for isoprenoid biosynthesis (the non-mevalonate pathway). To establish a fermentative process for mevalonate production, enzymes for mevalonate synthesis from *Enterococcus faecalis* were expressed in *Escherichia coli*, a non-mevalonate pathway bacterium. Mevalonate was accumulated, indicating a redirection of acetate metabolism by the expressed enzyme. The recombinant *E. coli* produced 47 g mevalonate l<sup>-1</sup> in 50 h of fed-batch cultivation in a 2 l jar fermenter; this is the highest titer ever reported demonstrating the superiority of *E. coli* in its ability of acetyl-CoA supply and its inability to degrade mevalonate.

L30 ANSWER 3 OF 7 MEDLINE on STN DUPLICATE 3  
 ACCESSION NUMBER: 2004382380 MEDLINE Full-text  
 DOCUMENT NUMBER: PubMed ID: 15286992  
 TITLE: Multienzyme mevalonate pathway bioreactor.  
 AUTHOR: Sutherlin Autumn; Rodwell Victor W  
 CORPORATE SOURCE: Department of Biochemistry, Purdue University, 175 South  
 University Street, West Lafayette, Indiana 47907-2063, USA.  
 SOURCE: Biotechnology and bioengineering, (2004 Aug 20) Vol. 87,  
 No. 4, pp. 546-51.  
 Journal code: 7502021. ISSN: 0006-3592.  
 PUB. COUNTRY: United States  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 200501  
 ENTRY DATE: Entered STN: 3 Aug 2004  
 Last Updated on STN: 26 Jan 2005  
 Entered Medline: 25 Jan 2005

AB The five-carbon metabolic intermediate isopentenyl diphosphate constitutes the basic building block for the biosynthesis of all isoprenoids in all forms of life. Two distinct pathways lead from amphibolic intermediates to isopentenyl diphosphate. The Gram-positive cocci and certain other pathogenic bacteria employ exclusively the mevalonate pathway, a set of six enzyme-catalyzed reactions that convert 3 mol of acetyl-CoA to 1 mol each of carbon dioxide and isopentenyl diphosphate. The survival of the Gram-positive cocci requires a fully functional set of mevalonate pathway enzymes. These enzymes therefore represent potential targets of inhibitors that might be employed as antibiotics directed against multidrug-resistant strains of certain bacterial pathogens. A rapid throughput, bioreactor-based assay to assess the effects of potential inhibitors on several enzymes simultaneously should prove useful for the survey of candidate inhibitors. To approach this goal, and as a proof of concept, we employed enzymes from the Gram-positive pathogen *Enterococcus faecalis*. Purified recombinant enzymes that catalyze the first three reactions of the mevalonate pathway were immobilized in two kinds of continuous flow enzyme bioreactors: a classical hollow fiber bioreactor and an immobilized plug flow bioreactor that exploited a novel method of enzyme immobilization. Both bioreactor types employed recombinant acetoacetyl-CoA thiolase, HMG-CoA synthase, and HMG-CoA reductase from *E. faecalis* to convert acetyl-CoA to mevalonate, the central intermediate of the mevalonate pathway. Reactor performance was monitored continuously by spectrophotometric measurement of the concentration of NADPH in the reactor effluent. Additional potential applications of an Ni(++) affinity support bioreactor include using recombinant enzymes from extremophiles for biosynthetic applications. Finally, linking a Ni(++) affinity support bioreactor to an HPLC-mass spectrometer would provide an experimental and pedagogical tool for study of metabolite flux and pool sizes of intermediates to model regulation in intact cells.

L30 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:810840 CAPLUS Full-text  
TITLE: The Roles of Active Site Aspartate and Alanine in  
Enterococcus faecalis 3-Hydroxy-3-  
methylglutaryl Coenzyme A Synthase  
AUTHOR(S): Robison, Aaron D.; Pond, Jason B.; Sutherlin, Autumn  
L.  
CORPORATE SOURCE: Chemistry, Abilene Christian University, Abilene, TX,  
79699, USA  
SOURCE: Abstracts, 60th Southwest Regional Meeting of the  
American Chemical Society, Fort Worth, TX, United  
States, September 29-October 4 (2004), SEPT04-358.  
American Chemical Society: Washington, D. C.  
CODEN: 69FVXC  
DOCUMENT TYPE: Conference; Meeting Abstract  
LANGUAGE: English

AB Biosynthesis of isopentenyl diphosphate (IPP), the precursor of all isoprenoids, proceeds via two distinct pathways. Sequence comparisons and microbiol. data suggest that Gram-pos. cocci produce IPP only through the mevalonate pathway. Therefore, the enzymes of the mevalonate pathway of Gram-pos. bacteria offer potential targets for development of active site-directed inhibitors. Site-directed mutagenesis was employed to generate Enterococcus faecalis 3-hydroxy-3-methylglutaryl CoA (HMG-CoA) synthase A110G and D184A mutants. The mutant enzymes were expressed in Escherichia coli from a pET28 vector with an attached N-terminal histidine tag. The expressed mutants were purified by affinity chromatog. on Co2+-agarose. Kinetic anal. showed the A110G mutation increased the activity of the enzyme by two orders of magnitudes. While D184A decreased activity 1500-fold and appears to participate in the second step of catalysis.

L30 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:913306 CAPLUS Full-text  
DOCUMENT NUMBER: 139:392141  
TITLE: Mevalonic acid biosynthetic production in  
microorganism lacking mevalonate pathway by expression  
of mevalonate biosynthetic enzymes  
INVENTOR(S): Tabata, Kazuhiko; Hashimoto, Shin-ichi  
PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan  
SOURCE: PCT Int. Appl., 82 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003095651	A1	20031120	WO 2003-JP5765	20030508
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003234790	A1	20031111	AU 2003-234790	20030508
EP 1510583	A1	20050302	EP 2003-728047	20030508
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
US 2005287655	A1	20051229	US 2005-513759	20050408
PRIORITY APPLN. INFO.:			JP 2002-135073	A 20020510
			WO 2003-JP5765	W 20030508

AB A method for biosynthetic production of mevalonic acid from acetyl-CoA in microorganisms by transferring DNA encoding enzymes involved in the biosynthesis of mevalonic acid from acetyl-CoA into a host microorganism (preferably a microorganism having exclusively a non-mevalonic acid pathway) capable of biosynthesizing mevalonic acid from acetyl-CoA, is disclosed. Mevalonic acid can be efficiently produced by culturing the above microorganism and collecting mevalonic acid formed in a large amount in the culture. Enterococcus faecalis mvaE gene coding for acetylCoA acetyltransferase/3-hydroxy-3-methylglutarylCoA reductase (HMG-CoA reductase) and mvaS gene coding for 3-hydroxy-3-methylglutarylCoA synthase (HMG-CoA synthase), were cloned and used to transform E. coli XL1-Blue strain. Mevalonic acid was produced in E. coli transformed with those genes. Lactococcus lactis thilL gene for acetyl-CoA acetyltransferase, HMG-CoA reductase gene mvaA, and

HMG -CoA synthase gene hmcM were also cloned and introduced into E. coli for mevalonic acid production  
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 6 OF 7 MEDLINE on STN DUPLICATE 4  
ACCESSION NUMBER: 2002365197 MEDLINE Full-text  
DOCUMENT NUMBER: PubMed ID: 12107122  
TITLE: Enterococcus faecalis 3-hydroxy-3-methylglutaryl coenzyme A synthase, an enzyme of isopentenyl diphosphate biosynthesis.  
AUTHOR: Sutherlin Autumn; Hedl Matija; Sanchez-Neri Barbara; Burgner John W 2nd; Stauffacher Cynthia V; Rodwell Victor W  
CORPORATE SOURCE: Department of Biochemistry, Purdue University, West Lafayette, Indiana 47907-1153, USA.  
CONTRACT NUMBER: HL47113 (NHLBI)  
SOURCE: HL52115 (NHLBI)  
Journal of bacteriology, (2002 Aug) Vol. 184, No. 15, pp. 4065-70.  
Journal code: 2985120R. ISSN: 0021-9193.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200208  
ENTRY DATE: Entered STN: 12 Jul 2002  
Last Updated on STN: 23 Aug 2002  
Entered Medline: 22 Aug 2002

AB Biosynthesis of the isoprenoid precursor isopentenyl diphosphate (IPP) proceeds via two distinct pathways. Sequence comparisons and microbiological data suggest that multidrug-resistant strains of gram-positive cocci employ exclusively the mevalonate pathway for IPP biosynthesis. Bacterial mevalonate pathway enzymes therefore offer potential targets for development of active site-directed inhibitors for use as antibiotics. We used the PCR and Enterococcus faecalis genomic DNA to isolate the mvaS gene that encodes 3-hydroxy-3-methylglutaryl coenzyme A (HMG-CoA) synthase, the second enzyme of the mevalonate pathway. mvaS was expressed in Escherichia coli from a pET28 vector with an attached N-terminal histidine tag. The expressed enzyme was purified by affinity chromatography on Ni(2+)-agarose to apparent homogeneity and a specific activity of 10 micromol/min/mg. Analytical ultracentrifugation showed that the enzyme is a dimer (mass, 83.9 kDa; s(20,w), 5.3). Optimal activity occurred in 2.0 mM MgCl(2) at 37(o)C. The DeltaH(a) was 6,000 cal. The pH activity profile, optimum activity at pH 9.8, yielded a pK(a) of 8.8 for a dissociating group, presumably Glu78. The stoichiometry per monomer of acetyl-CoA binding was 1.2 +/- 0.2 and that of covalent acetylation was 0.60 +/- 0.02. The K(m) for the hydrolysis of acetyl-CoA was 10 micromM. Coupled conversion of acetyl-CoA to mevalonate was demonstrated by using HMG-CoA synthase and acetoacetyl-CoA thiolase/HMG-CoA reductase from E. faecalis.

L30 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2000:911403 CAPLUS Full-text  
DOCUMENT NUMBER: 134:67159  
TITLE: Mevalonate pathway genes involved in isopentenyl diphosphate biosynthesis in gram-positive cocci  
INVENTOR(S): Brown, James R.; Gwynn, Michael; Mathie, Thomas B.; Myers, Joseph E., Jr.; Traini, Christopher M.; Van Horn, Stephanie; Wilding, Edwina Imogen  
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA; Smithkline Beecham P.L.C.  
SOURCE: PCT Int. Appl., 158 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000078935	A1	20001228	WO 2000-US17262	20000622

W: JP

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.: US 1999-140519P P 19990622  
US 1999-146682P P 19990802

AB The invention provides mevalonate pathway genes from gram-pos. bacteria, encoded polypeptides, and methods for recombinant expression. Also provided are methods for utilizing mevalonate pathway genes, polypeptides, or antibodies for screening of antibacterial compds. The mevalonate pathway and the glyceraldehyde 3-phosphate (GAP)-pyruvate pathway are alternative routes for the

biosynthesis of the central isoprenoid precursor, isopentenyl diphosphate. Genomic anal. revealed that the staphylococci, streptococci, and enterococci possess genes predicted to encode all of the enzymes of the mevalonate pathway and not the GAP-pyruvate pathway, unlike *Bacillus subtilis* and most gram-neg. bacteria studied, which possess only components of the latter pathway. Phylogenetic and comparative genome analyses suggest that the genes for mevalonate biosynthesis in gram-pos. cocci, which are highly divergent from those of mammals, were horizontally transferred from a primitive eukaryotic cell. Enterococci uniquely encode a bifunctional protein predicted to possess both 3-hydroxy-3-methylglutaryl CoA (HMG-CoA) reductase and acetyl-CoA acetyltransferase activities. Genetic disruption expts. have shown that five genes encoding proteins involved in this pathway (HMG-CoA synthase, HMG-CoA reductase, mevalonate kinase, phosphomevalonate kinase, and mevalonate diphosphate decarboxylase) are essential for the in vitro growth of *Streptococcus pneumoniae* under standard conditions. Allelic replacement of the HMG-CoA synthase gene rendered the organism auxotrophic for mevalonate and severely attenuated in a murine respiratory tract infection model. The mevalonate pathway thus represents a potential antibacterial target in the low-G+C gram-pos. cocci.

REFERENCE COUNT: 1      THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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## WEST Search History

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DATE: Wednesday, July 19, 2006

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		<i>DB=PGPB; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L6	(hmg-coa synthase or 3-hydroxy-3-methylglutaryl synthase) same crystal	1
		<i>DB=USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L5	(hmg-coa synthase or 3-hydroxy-3-methylglutaryl synthase) same crystal	1
<input type="checkbox"/>	L4	L3 and crystal	72
<input type="checkbox"/>	L3	(hmg-coa synthase or 3-hydroxy-3-methylglutaryl synthase)	242
		<i>DB=PGPB; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L2	(hmg-coa synthase or 3-hydroxy-3-methylglutaryl synthase) and faecalis	4
		<i>DB=USPT,USOC,EPAB,JPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L1	(hmg-coa synthase or 3-hydroxy-3-methylglutaryl synthase) and faecalis	3

END OF SEARCH HISTORY

## Hit List

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Search Results - Record(s) 1 through 4 of 4 returned.

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☐ 1. Document ID: US 20050287655 A1

L2: Entry 1 of 4

File: PGPB

Dec 29, 2005

PGPUB-DOCUMENT-NUMBER: 20050287655

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050287655 A1

TITLE: Process for producing mevalonic acid

PUBLICATION-DATE: December 29, 2005

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Tabata, Kazuhiko	Tokyo		JP
Hashimoto, Shin-chi	Tokyo		JP

US-CL-CURRENT: 435/136; 435/252.3

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 2. Document ID: US 20050214773 A1

L2: Entry 2 of 4

File: PGPB

Sep 29, 2005

PGPUB-DOCUMENT-NUMBER: 20050214773

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050214773 A1

TITLE: Novel purified polypeptides from bacteria

PUBLICATION-DATE: September 29, 2005

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Edwards, Aled	Toronto		CA
Dharamsi, Akil	Richmond Hill		CA
Vedadi, Masoud	Toronto		CA
Alam, Muhammad Zahoor	Oshawa		CA
Domagala, Megan	Woodstock		CA
Houston, Simon	Toronto		CA
Lam, Robert	Toronto		CA

Li, Qin	Toronto	CA
Nethery-Brokkx, Kathleen	Toronto	CA
Ng, Ivy	Toronto	CA
Pinder, Benjamin	Toronto	CA
Viola, Cristina	Caledon	CA
Wrezel, Olga	Mississauga	CA
Kanagarajah, Dhushy	Mississauga	CA
Mansoury, Kamran	Toronto	CA
Necakov, Sasha Aleksandar	Toronto	CA
Vallee, Francois	Toronto	CA
McDonald, Merry-Lynn	Ajax	CA

US-CL-CURRENT: 435/6; 435/193, 435/252.3, 435/320.1, 435/69.1, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw D
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☐ 3. Document ID: US 20050181464 A1

L2: Entry 3 of 4

File: PGPB

Aug 18, 2005

PGPUB-DOCUMENT-NUMBER: 20050181464

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050181464 A1

TITLE: Novel purified polypeptides from bacteria

PUBLICATION-DATE: August 18, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Edwards, Aled	Toronto		CA
Dharamsi, Akil	Richmond Hill		CA
Vedadi, Masoud	Toronto		CA
Alam, Muhammad Zahoor	Oshawa		CA
Arrowsmith, Cheryl	Toronto		CA
Awrey, Donald E.	Mississauga		CA
Beattie, Bryan	Oakville		CA
Buzadzija, Kristina	Mississauga		CA
Clarke, Teresa	Toronto		CA
Domagala, Megan	Woodstock		CA
Houston, Simon	Toronto		CA
Kanagarajah, Dhushy	Mississauga		CA
Li, Qin	Toronto		CA
Mansoury, Kamran	Toronto		CA
McDonald, Merry-Lynn	Ajax		CA
Nethery-Brokkx, Kathleen	Toronto		CA
Ng, Ivy	Toronto		CA
Ouyang, Hui	Toronto		CA



Richards, Dawn	Toronto	CA
Vallee, Francois	Toronto	CA
Virag, Cristina	Brampton	CA

US-CL-CURRENT: [435/7.32](#); [436/86](#), [530/350](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw D
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☐ 4. Document ID: US 20050043297 A1

L2: Entry 4 of 4

File: PGPB

Feb 24, 2005

PGPUB-DOCUMENT-NUMBER: 20050043297

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050043297 A1

TITLE: Farnesyl dibenzodiazepinone, processes for its production and its use as a pharmaceutical

PUBLICATION-DATE: February 24, 2005

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Bachmann, Brian O.	Nashville	TN	US
McAlpine, James B.	Montreal		CA
Zazopoulos, Emmanuel	Montreal		CA
Farnet, Chris M.	Outremont		CA
Pirae, Mahmoud	Montreal		CA

US-CL-CURRENT: [514/220](#); [540/493](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw D
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Terms

(hmg-coa synthase or 3-hydroxy-3-methylglutaryl synthase) and faecalis

Documents

4

Display Format:  [Previous Page](#)[Next Page](#)[Go to Doc#](#)

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**Search Results - Record(s) 1 through 3 of 3 returned.**

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☐ 1. Document ID: US 7076372 B1

L1: Entry 1 of 3

File: USPT

Jul 11, 2006

US-PAT-NO: 7076372

DOCUMENT-IDENTIFIER: US 7076372 B1

TITLE: Crystal structure of MvaS

DATE-ISSUED: July 11, 2006

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Brooun; Alexei	San Diego	CA		US
Hosfield; David J.	San Diego	CA		US
Skene; Robert J.	San Diego	CA		US
Tari; Leslie W.	San Diego	CA		US
Ye; Sheng	Allen	TX		US

US-CL-CURRENT: 702/19; 703/11

## ABSTRACT:

Provided are structure coordinates relating to MvaS and its various uses.

5 Claims, 6 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 137

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Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 2. Document ID: US 6713455 B2

L1: Entry 2 of 3

File: USPT

Mar 30, 2004

US-PAT-NO: 6713455

DOCUMENT-IDENTIFIER: US 6713455 B2

TITLE: 6-O-carbamate-11,12-lacto-ketolide antimicrobials

DATE-ISSUED: March 30, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Grant, III; Eugene B.	Flemington	NJ		
Henninger; Todd C.	High Bridge	NJ		
Macielag; Mark J.	Branchburg	NJ		
Guiadeen; Deodialsingh	Linden	NJ		

US-CL-CURRENT: 514/29; 536/7.2, 536/7.4

## ABSTRACT:

6-O-Carbamate-11,12-lacto-ketolide antimicrobials of the formula: ##STR1##

wherein R.sup.1, R.sup.2, R.sup.3 R.sup.7, and R.sup.8 are as described herein and in which the substituents have the meaning indicated in the description. These compounds are useful as antibacterial agents.

24 Claims, 0 Drawing figures  
Exemplary Claim Number: 1,18

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. Data
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☐ 3. Document ID: US 6352840 B1

L1: Entry 3 of 3

File: USPT

Mar 5, 2002

US-PAT-NO: 6352840

DOCUMENT-IDENTIFIER: US 6352840 B1

TITLE: pskG

DATE-ISSUED: March 5, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gwynn; Michael	Chester Springs	PA		
Wilding; Edwina Imogen	Paoli	PA		

US-CL-CURRENT: 435/69.1; 435/252.3, 435/320.1, 435/325, 536/23.7

## ABSTRACT:

The invention provides pskG polypeptides and polynucleotides encoding pskG polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are methods for utilizing pskG polypeptides to screen for antibacterial compounds.

16 Claims, 0 Drawing figures  
Exemplary Claim Number: 1



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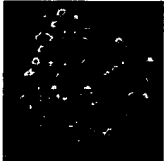

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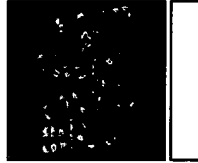
7 Structure Hits 46 Web Page Hits 1 Unreleased Structure

<input checked="" type="checkbox"/> 1XPK			<b>CRYSTAL STRUCTURE OF STAPHYLOCOCCUS AUREUS HMG-COA SYNTHASE WITH HMG-COA AND WITH ACETOACETYL-COA AND ACETYLATED CYSTEINE</b>	1
		<b>Characteristics</b>	Release Date: 02-Nov-2004 Exp. Method: X Ray Diffraction	
		<b>Classification</b>	Resolution: 2.00 Å	
		<b>Compound</b>	<b>Transferase</b>	
		<b>Authors</b>	Mol. Id: 1 Molecule: 3 Hydroxy 3 Methylglutaryl Coa Synthase Mol. Id: 2 Molecule: 3 Hydroxy 3 Methylglutaryl Synthase	
			Theisen, M.J., Misra, I., Saadat, D., Campobasso, N., Miziorko, H.M., Harrison, D.H.T.	
<input checked="" type="checkbox"/> 1X9E			<b>Crystal structure of HMG-CoA synthase from Enterococcus faecalis</b>	
		<b>Characteristics</b>	Release Date: 01-Nov-2005 Exp. Method: X Ray Diffraction	
		<b>Classification</b>	Resolution: 2.40 Å	
		<b>Compound</b>	<b>Lyase</b>	
		<b>Authors</b>	Mol. Id: 1 Molecule: Hmg Coa Synthase	
			Steussy, C.N., Vartia, A.A., Burgner II, J.W., Sutherlin, A., Rodwell, V.W., Stauffacher, C.	
<input checked="" type="checkbox"/> 1YSL			<b>Crystal structure of HMG-CoA synthase from Enterococcus faecalis with AcetoAcetyl-CoA ligand.</b>	
		<b>Characteristics</b>	Release Date: 08-Nov-2005 Exp. Method: X Ray Diffraction	
		<b>Classification</b>	Resolution: 1.90 Å	
		<b>Compound</b>	<b>Lyase</b>	
		<b>Authors</b>	Mol. Id: 1 Molecule: Hmg Coa Synthase	
			Steussy, C.N., Vartia, A.A., Burgner II, J.W., Sutherlin, A., Rodwell, V.W., Stauffacher, C.	
			Crystal structure of 3-hydroxy-3-methylglutaryl-coenzyme A synthase from	

☒ 1TVZ



Staphylococcus aureus



**Characteristics**

**Classification**

**Compound**

**Authors**

Release Date: 31-Aug-2004 Exp. Method: X Ray Diffraction

Resolution: 2.00 Å

**Lyase**

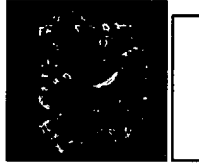
Mol. Id: 1 Molecule: 3 Hydroxy 3 Methylglutaryl Coa Synthase

Campobasso, N., Patel, M., Wilding, I.E., Kallender, H., Rosenberg, M., Gwynn, M.

☒ 1XPM



Crystal Structure of Staphylococcus aureus HMG-CoA Synthase with HMG-CoA and Acetoacetyl-CoA and Acetylated Cysteine



**Characteristics**

**Classification**

**Compound**

**Authors**

Release Date: 02-Nov-2004 Exp. Method: X Ray Diffraction

Resolution: 1.60 Å

**Transferase**

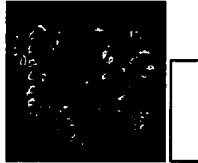
Mol. Id: 1 Molecule: 3 Hydroxy 3 Methylglutaryl Coa Synthase

Theisen, M.J., Misra, I., Saadat, D., Campobasso, N., Mizioroko, H.M., Harrison, D.H.T.

☒ 1TXT



Staphylococcus aureus 3-hydroxy-3-methylglutaryl-CoA synthase



**Characteristics**

**Classification**

**Compound**

**Authors**

Release Date: 31-Aug-2004 Exp. Method: X Ray Diffraction

Resolution: 2.50 Å

**Lyase**

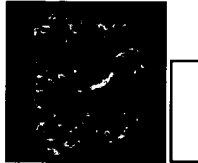
Mol. Id: 1 Molecule: 3 Hydroxy 3 Methylglutaryl Coa Synthase

Campobasso, N., Patel, M., Wilding, I.E., Kallender, H., Rosenberg, M., Gwynn, M.

☒ 1XPL



Crystal Structure of Staphylococcus aureus HMG-CoA Synthase with Acetoacetyl-CoA and Acetylated Cysteine



**Characteristics**

**Classification**

**Compound**

**Authors**

Release Date: 02-Nov-2004 Exp. Method: X Ray Diffraction

Resolution: 2.00 Å

**Transferase**

Mol. Id: 1 Molecule: 3 Hydroxy 3 Methylglutaryl Coa Synthase

Theisen, M.J., Misra, I., Saadat, D., Campobasso, N., Mizioroko, H.M., Harrison, D.H.T.